



State of Utah

Department of Natural Resources

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Division of Oil, Gas & Mining

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Lieutenant Governor

November 23, 2005

Jay Marshall, Resident Agent
Utah American Energy Inc.
P.O. Box 986
Price, Utah 84501

Subject: Supplemental Information Needed Lila Canyon Extension of the Horse Canyon Mine, UtahAmerican Energy, Inc. (UEI), Horse Canyon Mine, C/007/0013, Task ID #2304, Outgoing File

Dear Mr. Marshall:

Upon further evaluation of the entire package and in light of the additional information received at the informal conference concluded on November 18, 2005, it has been determined that some areas of the mining and reclamation plan need a further explanation regarding areas where there are questions about the compliance with the requirements of R645-301 and 302. It is the responsibility of the applicant to ensure that the mining and reclamation plan is complete, accurate, and complies with all of the requirements of the state program (R645-300-301- and 303). The following additional information is necessary to further evaluate the application for compliance with the State program.

- UEI must show flow modeling of ephemeral streams. The modeling must demonstrate different size events (such as 2 - year, 6 - hour event, 10 - year, 6 - hour event, and 25 - year, 6 - hour event).
- UEI must address limitations with sampling ephemeral streams for establishing baseline water quality and flow data, including such factors as access, holding times, and applicability to the Lila Canyon Project. UEI must also discuss why they have not used remote or automatic sampling methods (crest-staff gauges, single stage samplers, ISCO instruments, etc.)
- UEI must remove the phrase "ephemeral acting" from the Mining and Reclamation Plan (MRP) and replace with "intermittent by rule with ephemeral flow."

- UEI must redo the map of the potentiometric surface on Plate 7-1 and Plate 7-2a:
 - Use a larger contour interval that more realistically reflects the accuracy of the data over the area mapped (such as 25 - 50- or 100-foot contours).
 - Consider using the water level at the Horse Canyon Mine sump as a fourth data point to improve accuracy.
 - Consider the area that can realistically be covered by extrapolating the data.
- UEI must include additional information about renewable resources:
 - Section 525.110 of the MRP must list all maps that show renewable resources such as grazing, wildlife habitat, and areas of aquifer recharge. The maps must be at a scale of 1:12,000.
 - Section 525.120 of the MRP must give a detailed narrative of the types of renewable resources in and around the permit area and what potential impact subsidence could have. UEI must also address the possibility of timbering in the area.
 - UEI must also state that since renewable resources exist, a subsidence control plan is needed.
- UEI must address the 100-foot stream buffer zone issues
 - Show the 100-foot stream buffer zones in Lila Canyon Wash and the Right Fork of Lila Canyon Wash on all appropriate maps.
 - Explain why there will be no impacts to Lila Canyon or the Right Fork of Lila Canyon Wash if mining and reclamation activities occur within the 100-foot buffer zone.
 - Explain why no buffer zones are needed on any of the other drainages on and adjacent to the permit area other than the Lila Canyon Wash and the Right Fork of Lila Canyon Wash.
- UEI must provide additional information on the Stinky Springs:
 - Show the springs on Plate 7-1 and other maps.
 - Describe if the springs are related to a fault.
 - Describe if the springs are in a saturated zone or if they are part of a regional aquifer.
- UEI must define the aquifers in and around the permit area:
 - Show that there is or is not a regional aquifer in the area.
 - Show the relationship of faults to ground water resources.
- UEI must discuss the possibility of mining - related impacts to Range Creek, Price River Basin and Green River.

- UEI must explain the relationship between overburden thickness and subsidence impacts.
 - UEI must not rely on blanket statements about the overburden thickness being sufficient to protect resources.
 - UEI must cite studies that show that streams can be subsided with no significant impacts. (for example, Burnout Canyon Study)
 - UEI must clearly describe the mitigation measures that will be employed if fractures or if any other subsidence-related features impact the lands on or adjacent to the permit area.
- UEI must show the extent of spring and seep surveys performed by JBR and Earthfax on maps. The Earthfax report must be included in the MRP or made public.
- UEI must include and describe the Stinky Spring Wash surface water monitoring site on Plate 7-1 and other applicable maps as well as in Appendix 7-7.
- UEI must correct the water consumption calculations to reflect 4.5 million tons not 4 million tons in Table 2 of Appendix 7-3. UEI must clarify the difference between the estimated 15 million gallons of consumption cited in Appendix 7-3 and the estimate of consumption cited in Table 2 of Appendix 7-3.
- UEI must define and explain the groundwater recharge source.
- UEI must be more specific about their sources for potable and process water.
- UEI must update the wildlife habitat boundaries and ranking to include the pronghorn on Plate 3-1 (Confidential).
- UEI must explain the proposed construction techniques for the refuse pile:
 - Define “end dumping”.
 - Explain why “end dumping” will not be used.
- UEI must show all future expansion project proposals that are mentioned in the MRP on the affected area maps (R645-301-521.141), such as:
 - Rail spur.
 - Coal load out.
 - Conveyor belts.

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- UEI must update the surface ownership information and maps to show the areas that were recently transferred to CEU.
- UEI must state in Section 420 of the MRP, Air Quality, that the current air quality permit is for 1.5 million tons of coal per year. UEI should commit that they will obtain a new air quality permit to accommodate future increases in production.
- UEI must include analytical data about the Horse Canyon Waste Rock Site and include the pertinent information in the MRP.
- In a cover letter, UEI should explain and redo SUWA's Exhibit 1 that implies there are gaps in the data.

It is the burden of the applicant to satisfy the criteria of the rules before the Division can issue a permit. Please submit all information that bolsters the application and clarifies the plan.

If you have any questions, please feel free to call me at (801) 538-5268, Dana Dean at (801) 538-5320 or Wayne Western at (801) 538-5263.

Sincerely,

Pamela Grubaugh-Littig
Permit Supervisor

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